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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,673	12/29/2000	Michael F. Deering	5181-54400/P-4832	9125

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EXAMINER

NGUYEN, PHU K

ART UNIT

PAPER NUMBER

2671

DATE MAILED: 03/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,673

Applicant(s)

DEERING, MICHAEL F. 

Examiner

Phu K. Nguyen

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

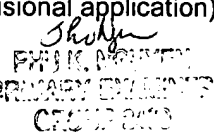
Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 15-18, 30-33 and 46 is/are rejected.
- 7) ☒ Claim(s) 4-14, 19-29 and 34-45 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 15, 16, 30, 31, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over LIMBERG (6,441,843).

As per claim 1, Limberg teaches the claimed "method for generating pixels for display device" comprising:

"receiving graphics data" (Limberg, figure 2, Digitized Baseband Symbol Coding Input);

"rendering a first plurality of samples" (Limberg, column 2, lines 51-63);

"filtering said first plurality of samples" (Limberg, Channel Equalizer 10);

"computing first negativity value based on said first set of output pixels" (Limberg, Error Detector for Decision feedback 21); and

"adjusting said first filter in response to said first negativity value" (Limberg, Filter Coefficient Update Calculation Apparatus 20).

It is noted that Limberg does not explicitly teach that "the first negativity value measures an amount of negativity in said frame" as claimed. However, Limberg's Error Detector 21, which calculates the error signal, suggests the "amount of negativity" of the video signal as claimed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure Limberg's method as claimed

because the error of the signal after filtered can be regarded as "amount of negativity" in said generated frame.

Claim 2 adds into claim 1 "a negativity threshold" which would have been obvious to Limberg's error which allows some degree of tolerance.

Claim 3 adds into claim 2 "the threshold is adjustable by a user" which would have been obvious to Limberg's error with some degree of tolerance decided by Applicant.

Claim 15 adds into claim 1 "a display device" which Limberg teaches in the display on the Television (column 1, lines 11-15).

As per claim 16, Limberg teaches the claimed "computer readable memory medium" comprising the steps of:

"receive graphics data" (Limberg, figure 2, Digitized Baseband Symbol Coding Input);

"render a first plurality of samples" (Limberg, column 2, lines 51-63);

"filter said first plurality of samples" (Limberg, Channel Equalizer 10);

"compute first negativity value based on said first set of output pixels" (Limberg, Error Detector for Decision feedback 21); and

"adjust said first filter in response to said first negativity value" (Limberg, Filter Coefficient Update Calculation Apparatus 20).

It is noted that Limberg does not explicitly teach that "the first negativity value measures an amount of negativity in said frame" as claimed. However, Limberg's Error Detector 21, which calculates the error signal, suggests the "amount of negativity" of the

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video signal as claimed. Furthermore, although Limberg actually teaches the hardware (figures 1-2) to perform these steps, not as the instructions of computer program as claimed, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to write a computer program to implement the functions of the device as claimed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure Limberg's method as claimed because the error of the signal after filtered can be regarded as "amount of negativity" in said generated frame.

Claim 17 adds into claim 16 "a negativity threshold" which would have been obvious to Limberg's error which allows some degree of tolerance.

Claim 18 adds into claim 17 "the threshold is adjustable by a user" which would have been obvious to Limberg's error with some degree of tolerance decided by Applicant.

Claim 30 adds into claim 16 "a display device" which Limberg teaches in the display on the Television (column 1, lines 11-15).

As per claim 31, Limberg teaches the claimed "graphic system" comprising:

"a graphics data stream" (Limberg, figure 2, Digitized Baseband Symbol Coding Input);

"a sample buffer" (Limberg, RAMs 41-46);

"sample-to-pixel calculation unit" (Limberg, Channel Equalizer 10);

"a negativity computation unit" (Limberg, Error Detector for Decision feedback 21); and

“adjusting said first filter in response to said first negativity value” (Limberg, Filter Coefficient Update Calculation Apparatus 20).

It is noted that Limberg does not explicitly teach that “the first negativity value measures an amount of negativity in said frame” as claimed. However, Limberg’s Error Detector 21, which calculates the error signal, suggests the “amount of negativity” of the video signal as claimed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure Limberg’s method as claimed because the error of the signal after filtered can be regarded as “amount of negativity” in said generated frame.

Claim 32 adds into claim 31 “a negativity threshold” which would have been obvious to Limberg’s error which allows some degree of tolerance.

Claim 33 adds into claim 32 “the threshold is adjustable by a user” which would have been obvious to Limberg’s error with some degree of tolerance decided by Applicant.

Claim 46 adds into claim 311 “a display device” which Limberg teaches in the display on the Television (column 1, lines 11-15).

Accordingly, the claimed inventions as represented in claims 1-3, 15-18, 30-33, and 46 do not represent a patentable distinction over the art of record.

Claims 4-14, 19-29, and 34-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (703)305 - 9796. The examiner can normally be reached on M-F 8:00-4:30.

The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-6606 for regular communications and (703)308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3800.

Phu Nguyen
February 27, 2003

Phu Nguyen
PHU NGUYEN
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